CHAPTER 9

EMERGENCIES

Although some emergencies are unavoidable, most of them are created by drivers who are driving carelessly or too fast or who fail to take proper care of their vehicles. Yet, once in danger, the important thing is not how you got into it, but how you get out of it. The techniques discussed here are not foolproof, but they will give you a better chance of avoiding a serious accident.

BLOWOUTS

A driver seldom gets a warning before a blowout. There is usually a loud report before the vehicle immediately starts swerving to one side or swaying dangerously. Use all your strength on the steering wheel to keep the vehicle going straight ahead. Do not apply the brakes until the engine has slowed the vehicle down and you are sure you have it under control. If you are in a passing lane when a blowout occurs, do not attempt to get to the highway shoulder until the lanes on your right are clear. The chances are your tire has already been damaged beyond repair, so do not risk an accident in an effort to bring your vehicle to a halt.

SKIDS

Almost all skids can be avoided if you drive slowly enough and if you stop, start, and turn slowly enough on slippery surfaces. If you start to skid, you may be able to regain control if you ease up slowly on the accelerator and do not apply the brakes. Keep your vehicle in gear. If the skid occurs when you are braking, take your foot off the brake. It may be necessary to feed gas carefully to reduce the braking effect of the engine. In either case, the reason for reducing the brake action is to keep the wheels from slowing down too quickly and making the skid worse.

At the same time, turn your wheels in the direction of the skid. If the rear end of your vehicle is skidding to the right, turn your steering wheel to the right. If it is skidding to the left, turn your steering wheel to the left. If you start to skid to the left and turn your wheels to the left, you may steer into oncoming traffic on the other side of the road. Do not turn the steering wheel too sharply or keep it turned too long. If you do, you may start skidding in the opposite direction. Ease the steering wheel back to the center position as you recover from the skid and regain control of your vehicle.

Let the engine slow your vehicle down gradually. If you use your brakes to stop, do not hold the pedal down, but pump it gently until you come almost to a complete stop. Figure 9-1 shows how to recover from a skid.

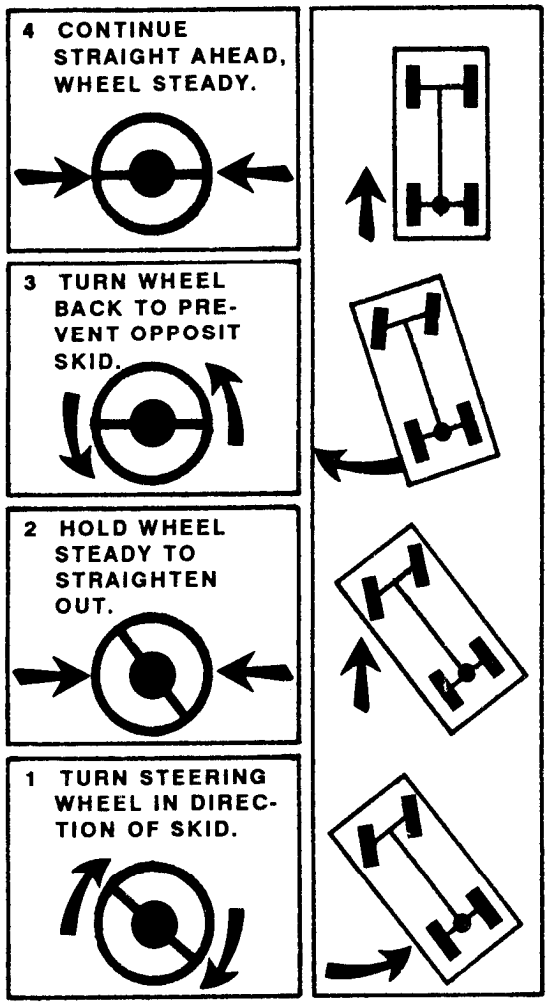

FIGURE 9-1. Recovering from a Skid.

RUNNING OFF THE PAVEMENT

At some point, your vehicle may drift off the roadway onto the shoulder or you may steer onto the shoulder to avoid a collision. There may be a drop-off of several inches from the edge of the road to the shoulder. Most shoulders provide less traction than the roadway surface. They may be quite narrow and consist of loose gravel, grass, or mud. Despite these variables, pulling off onto the shoulder and returning to the roadway can be done safely. Practice the proper procedures:

- If you run the two right or left wheels off the paved roadway, keep a firm grip on the steering wheel. Keep the vehicle traveling straight ahead. Straddle the edge of the pavement. You must fight the tendency of the wheels to pull toward soft shoulders. You also must resist the urge to immediately whip the vehicle back onto the pavement.

- Next, ease off the accelerator pedal so the vehicle slows down. Avoid braking, if possible; if braking is necessary, use a gentle squeeze braking application so you can control steering.

- Before returning to the pavement, visually check ahead, to the sides, and to the rear. Unless some object beside the road poses a serious threat of a collision, avoid trying to return to the roadway immediately. Move the off-road tires out about 1 l/2 to 2 feet away from the pavement edge. When it is safe and your speed is under control, turn the wheel quickly about a quarter turn to the right or left as necessary. This lets the tire climb the pavement edge and get back on the roadway.

- As soon as the front tires are back on the roadway, counter steer quickly to maintain your proper lane.

BRAKE FAILURE

If your brakes fail and the failure is not related to engine failure, pump the brake pedal rapidly (if vehicle has hydraulic brakes) to restore braking action long enough to get off the highway. If this does not work, apply steady pressure to the parking brake that controls the rear wheels. (Be careful if you use the parking brake to stop. Be prepared to release the brake if the rear wheels lock. Then reapply the parking brake if needed.) Downshifting your vehicle also serves as a braking force. Find an escape ramp or a safe exit from the highway. Communicate your emergency to other drivers by sounding your air horns and flashing your lights. In more extreme cases, you may need severe methods to slow your vehicle. You may have to run along an embankment, scrape against a curve, or drive into bushes, hedges, or other obstructions.

DOWNHILL BRAKING

To maintain control of a vehicle (especially loaded) while descending downhill, make sure that downhill braking procedures are used as indicated in the applicable -10 technical manual.

> **NOTE:** As a rule of thumb, you should go down the hill at least one gear lower than you used to come up the hill. The brakes are used with the engine and transmission to keep the vehicle under control.

LESS SERIOUS ACCIDENTS

Sometimes you can avoid a serious accident only by deliberately choosing a less serious one. Suppose you are driving at about 50 MPH on a two-lane road. Two vehicles are approaching from the opposite direction on the other side of the road. When they are fairly close to you, the second one suddenly pulls out to pass the first one. If you cannot stop or slow down in time, the only thing for you to do is to head for the right shoulder, even if it means an accident. If you stay where you are, you will have a head-on collision with the vehicle on the wrong side of the road. If you swerve to the left, you will probably have ahead-on collision with the other vehicle. The right shoulder may be dangerous, but almost any kind of accident is preferable to a head-on collision.

As another example, suppose you are being passed by one vehicle and there is another vehicle not far behind you. As the passing vehicle draws even with you, a small animal runs out on the road ahead of you. You must make an unpleasant decision and make it quickly. If you swerve to the right, the soft surface of the shoulder may turn your vehicle over. If you stop suddenly, you will probably be hit by the vehicle behind you. You do not want to hit the

animal, but it is the safest thing to do. If you do anything else, the animal may be killed anyway as well as several human beings.

VEHICLE FIRES

Preventing Vehicle Fires

Switch the vehicle engine off during refueling. Do not allow smoking or open flames within 50 feet of a vehicle during fueling or at an accident scene where there is danger from spilled gasoline or other flammables.

CAUTION

Keep the gasoline nozzle in contact with the gas tank when fueling.

When flares are authorized, issue instructions for their handling and storage on the vehicle. Since flares are a potential fire hazard, it is imperative that drivers take the prescribed precautions when handling them.

NOTE: Ignited flares will not be attached to a vehicle. Further information concerning warning devices is contained in Chapter 13.

When transporting explosives or flammable cargo, do not allow smoking within 50 feet of your vehicle. Also, do not allow your vehicle to become exposed to open flames or explosives when it is loaded with flammables or explosives. Flares are prohibited on vehicles transporting explosives or flammable cargo.

Vehicles designed for transporting bulk flammable liquids will be permanently marked with warning signs. When a general-purpose vehicle is used to transport liquid fuels or other dangerous cargo, it is your responsibility to place the prescribed warning signs on your vehicle. When you are dispatched to transport dangerous cargo, ask your supervisor for special instructions and warning signs for your truck. TM 9-1300-206 prescribes the warning signs for vehicles transporting hazardous cargo in the continental United States (CONUS). When operating overseas, be sure you have the required warning signs for all the countries in which you will be driving. Emergency measures to be taken when bulk fuel transporters develop leaks are given in Chapter 19.

CAUTION

When dispensing fuel to another vehicle or a tank, a ground cable must be secured to the dispensing vehicle and the vehicle or tank being filled.

Fighting Vehicle Fires

You have only limited resources for fighting a vehicle fire, so send for help from professional fire fighters when possible. Your fire fighting equipment usually consists of a hand fire extinguisher and any natural materials that may be available, such as sand and water. Those resources, when applied at the start of a fire, have a good chance of bringing it under control. However, once the fire has become major, you place yourself in danger with little possibility for success when you attempt to extinguish it with inadequate equipment.

When you discover your vehicle is on fire, pull it off the road in an open area away from buidling, trees, brush, or vehicles, or anything that might catch fire. Do not pull into a service station. Notify the fire and police departments. Keep the fire from spreading. Before trying to put out the fire, be sure it does not spread any further. With an engine fire, turn off the engine as soon as possible. Do not open the hood if you can avoid it. Discharge fire extinguishers through louvers, the radiator, or from the underside of the vehicle.

Use the right type of fire extinguisher. B:C rating is designed to work on electrical and liquid fires. The A:B:C: type is designed to work on burning wood, paper, and cloth as well as electrical and liquid fires.

Know how to use the fire extinguisher. Stay far away from the fire. Aim at the source or the base of the fire, not up in the flames. Position yourself upwind; let the wind carry the extinguisher to the fire rather than carry the flames to you. Only try to extinguish the fire if you know what you are doing.

CAUTION

When attempting to extinguish a fire, keep the wind to your back. In this position, the flames and poisonous fumes from the chemical extinguisher will be blown away from you.

You usually discover cargo fires in trucks and trailers by smelling or observing smoke escaping from around doors and/or from under the tarpaulin. Unless an adequate source of fire fighting equipment is available, do not open the cargo doors or remove the tarpaulin until you have moved your vehicle to a safe location where help can be obtained, preferably from a fire department. After help has been obtained, the doors may be opened cautiously or the tarpaulin partially removed and the source of the fire located. You may have to remove part of the cargo to find the source of the fire. Fires in a closed van or under a secure tarpaulin can only smother due to lack of oxygen.

Underinflated tires generate excessive heat during operation, a condition which, especially on dual wheels, may result in the tires igniting. Tires dragged along the road surface because of a locked wheel may begin to burn. Fires resulting from these conditions may be prevented by keeping your tires properly inflated, recognizing any difference in the performance of your vehicle that would indicate a locked wheel, and promptly taking corrective action. If a tire does start burning on your vehicle, you may not be able to extinguish it with your fire fighting equipment; however, you may prevent further damage by employing the following measures:

- When possible, remove the wheel from your vehicle and attempt to extinguish the fire by covering it with sand, mud, or water.
- When the wheel cannot be safely removed, drive your vehicle into sand, mud, or water and cover any exposed parts with mud or a similar substance.
- When the fire cannot be controlled by the above procedures, use your vehicle fire fighting equipment or other suitable substance to prevent the fire from spreading.

CAUTION

Do not attempt to transport a burned tire on your truck unless the fire is completely extinguished and the tire has cooled to normal temperature.